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### AMENDMENTS TO THE CLAIMS

- 1. (Previously presented) A modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents a polymer or oligomer of isobutene, butene, or propene containing 60-200 carbon atoms.
- 2. (Previously presented) The modified pigment product of claim 1, wherein Alk represents a polymer or oligomer of isobutene, butene, or propene containing 60-100 carbons.
- 3. (Original) The modified pigment product of claim 1, wherein Alk represents a polymer of butene.
- 4. (Cancelled)
- 5. (Previously presented) A modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidal group having the formula:

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wherein Q represents a bond or a -SO<sub>2</sub>C<sub>2</sub>H<sub>4</sub>(NR'Alkylene)<sub>P</sub>- group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

6 (Previously presented) A modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein the organic group represented by the formula -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

- 7. (Original) The modified pigment product of claim 5, wherein Q is a  $-SO_2C_2H_4(NR'C_2H_4)_{P-}$  group, R' is independently hydrogen or a  $(C_2H_4NH)_{P}H$  group, and p is an integer from 1-10.
- 8. (Original) The modified pigment product of claim 5, wherein Q is a bond.
- 9. (Original) The modified pigment product of claim 1, wherein X is an arylene group.
- 10. (Previously presented) A dispersion composition comprising a non-aqueous solvent and at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents a polymer or oligomer of isobutene, butene, or propene containing 60-200 carbon atoms.

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11. (Previously presented) The dispersion composition of claim 10, wherein Alk represents a polymer or oligomer of isobutene, butene, or propene containing 60-100 carbon atoms.

12. (Original) The dispersion composition of claim 10, wherein Alk represents a polymer of butene.

#### 13. (Cancelled)

14. (Previously presented) A dispersion composition comprising a non-aqueous solvent and at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidyl group having the formula:

wherein Q represents a bond or a  $-SO_2C_2H_4(NR'Alkylene)_P$ — group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

15. (Previously presented) A dispersion composition comprising a non-aqueous solvent and at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to

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the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein the organic group represented by the formula -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

- 16. (Original) The dispersion composition of claim 14, wherein Q is a  $-SO_2C_2H_4(NR^*C_2H_4)_{p-}$  group, R' is independently hydrogen or a  $(C_2H_4NH)_pH$  group, and p is an integer from 1-10.
- 17. (Original) The dispersion composition of claim 14, wherein Q is a bond.
- 18. (Original) The dispersion composition of claim 10, wherein the non-aqueous solvent is an aromatic or an aliphatic hydrocarbon solvent.
- 19. (Currently amended) A printing plate comprising: a) a substrate and b) a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkylene group a polymer or oligomer of isobutene, butene, or propene containing 50 60-200 carbon atoms.
- 20. (Original) The printing plate of claim 19, wherein the radiation-absorptive layer further comprises a polymer.
- 21. (Cancelled)
- 22. (Original) The printing plate of claim 19, wherein Alk represents a polymer of

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butene.

23. (Original) The printing plate of claim 19, wherein Alk represents a polymer or oligomer of isobutene, butene, or propene and maleic anhydride or derivatives thereof.

24. (Currently amended) The A printing plate of claim 19, comprising a) a substrate and b) a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidyl group having the formula:

$$-Q$$

wherein Q represents a bond or a  $-SO_2C_2H_4(NR'Alkylene)_P$ — group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

25. (Currently amended) The A printing plate of claim 19, comprising a) a substrate and b) a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group. Sp represents a spacer group, and Alk

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represents an alkenyl or alkyl group containing 50- 200 carbon atoms, and wherein the organic group represented by the formula -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

- 26. (Original) The printing plate of claim 24, wherein Q is a -SO<sub>2</sub>C<sub>2</sub>H<sub>4</sub>(NR'C<sub>2</sub>H<sub>4</sub>)<sub>P</sub>-group, R' is independently hydrogen or a (C<sub>2</sub>H<sub>4</sub>NH)<sub>P</sub>H group, and p is an integer from 1-10.
- 27. (Original) The printing plate of claim 24, wherein Q is a bond.
- 28. (Original) The printing plate of claim 19, wherein the substrate is a hydrophilic metal substrate.
- 29. (Original) The printing plate of claim 19, wherein the substrate is aluminum or polyester.
- 30. (Original) The printing plate of claim 19, wherein the polymer is selected from the group of styrene-acrylate polymers, styrene-butadiene copolymers, and acrylic polymers.
- 31. (Original) A method of imaging the printing plate of claim 19, comprising selectively exposing the plate to a laser output in a pattern representing an image to selectively remove or chemically modify at least the radiation-absorptive layer defining the pattern.
- 32. (Original) The method of claim 31, further comprising subjecting the plate to a solvent capable of removing portions of the imaged layer(s) defining the pattern.
- 33. (Currently amended) A flexographic printing plate comprising: a) a substrate, b) a UV curable layer, and c) a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly

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attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group a polymer or oligomer of isobutene, butene, or propene containing 50 60-200 carbon atoms.

- 34. (Original) The flexographic printing plate of claim 33, wherein the radiationabsorptive layer further comprises a polymer.
- 35. (Currently amended) A thermal transfer recording material comprising: a) an ink layer, b) a photothermal layer, and c) a support, wherein the photothermal layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group a polymer or oligomer of isobutene. butene, or propene containing 50 60-200 carbon atoms.
- 36. (Original) The thermal transfer recording material of claim 35, wherein the photothermal layer further comprises a polymer.
- 37. (Currently amended) A proofing material comprising: a) a radiation transparent support, b) a radiation curable layer, and c) a receiving layer, wherein the radiation curable layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group a polymer or oligomer of isobutene, butene, or propene containing 50 60-200 carbon atoms.
- 38. (Original) The proofing material of claim 37, wherein the radiation curable layer further comprises a polymer.

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- 39. (Original) A black matrix formed by applying a photosensitive coating on a clear substrate, exposing the coating imagewise, and developing and drying the coating, wherein the photosensitive coating comprises a solvent and at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an arylene, or alkylene group a polymer or oligomer of isobutene, butene, or propene containing 50 60-200 carbon atoms.
- 40. (Original) The black matrix of claim 39 further comprising a photosensitive resin.
- 41. (Currently amended) An electrophoretic display comprising an arrangement of microcapsules, wherein the microcapsules comprise a dielectric fluid and at least one modified pigment product comprising a pigment having attached at least one organic group comprising a group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene group, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group a polymer or oligomer of isobutene, butene, or propene containing 50 60-200 carbon atoms.
- 42. (Cancelled)
- 43. (Original) The electrophoretic display of claim 41, wherein Alk represents a polymer of butene.
- 44. (Original) The electrophoretic display of claim 41, wherein Alk represents a polymer or oligomer of isobutene, butene, or propene and maleic anhydride or derivatives thereof.

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45. (Currently amended) The An electrophoretic display of claim 41, comprising an arrangement of microcapsules, wherein the microcapsules comprise a dielectric fluid and at least one modified pigment product comprising a pigment having attached at least one organic group comprising a group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene group, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidal group having the formula:

$$-Q$$

wherein Q represents a bond or a  $-SO_2C_2H_4(NR'Alkylene)_{P}$ — group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

46. (Currently amended) The An electrophoretic display of claim 41, comprising an arrangement of microcapsules, wherein the microcapsules comprise a dielectric fluid and at least one modified pigment product comprising a pigment having attached at least one organic group comprising a group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene group, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein the organic group represented by the formula -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

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- 47. (Original) The electrophoretic display of claim 45, wherein Q is a  $-SO_2C_2H_4(NR'C_2H_4)_p$  group, R' is independently hydrogen or a  $(C_2H_4NH)_pH$  group, and p is an integer from 1-10.
- 48. (Original) The electrophoretic display of claim 45, wherein Q is a bond.
- 49. (Currently amended) A non-aqueous inkjet ink composition comprising a non-aqueous vehicle and a modified pigment product comprising a pigment having attached at least one organic group comprising a group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group a polymer or oligomer of isobutene, butene, or propene containing 50 60-200 carbon atoms.
- 50. (Original) The inkjet ink composition of claim 49, wherein the non-aqueous vehicle is a liquid vehicle.
- 51. (Original) The inkjet ink composition of claim 49, wherein the non-aqueous vehicle is a solid vehicle.
- 52. (Previously presented) A non-aqueous coating composition comprising the modified pigment product of claim 1.
- 53. (Previously presented) A polymer composition comprising the modified pigment product of claim 1.
- 54. (Previously presented) A non-aqueous ink composition comprising the modified pigment product of claim 1.

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55. (Previously presented) A toner composition comprising the modified pigment product of claim 1.

A flexographic printing plate comprising: a) a substrate, b) a UV curable layer, and c) a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidyl group having the formula:

wherein Q represents a bond or a  $-SO_2C_2H_4(NR'Alkylene)_{P''}$  group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

A flexographic printing plate comprising: a) a substrate, b) a UV curable layer, and c) a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group. Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms,

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and wherein the organic group represented by the formula -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

A thermal transfer recording material comprising: a) an ink layer, b) a photothermal layer, and c) a support, wherein the photothermal layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidyl group having the formula:

$$-Q$$

wherein Q represents a bond or a  $-SO_2C_2H_4(NR'Alkylene)_P$ — group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

A thermal transfer recording material comprising: a) an ink layer, b) a photothermal layer, and c) a support, wherein the photothermal layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein the organic group represented by the formula -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

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A proofing material comprising: a) a radiation transparent support, b) a radiation curable layer, and c) a receiving layer, wherein the radiation curable layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidyl group having the formula:

wherein Q represents a bond or a -SO<sub>2</sub>C<sub>2</sub>H<sub>4</sub>(NR'Alkylene)<sub>P</sub>- group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

61. (New) A proofing material comprising: a) a radiation transparent support, b) a radiation curable layer, and c) a receiving layer, wherein the radiation curable layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein the organic group represented formula the -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

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A black matrix formed by applying a photosensitive coating on a clear substrate, exposing the coating imagewise, and developing and drying the coating, wherein the photosensitive coating comprises a solvent and at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidal group having the formula:

wherein Q represents a bond or a  $-SO_2C_2H_4(NR'Alkylene)_P$ — group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

A black matrix formed by applying a photosensitive coating on a clear substrate, exposing the coating imagewise, and developing and drying the coating, wherein the photosensitive coating comprises a solvent and at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein the organic group represented by the formula -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

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A non-aqueous inkjet ink composition comprising a non-aqueous vehicle and a modified pigment product comprising a pigment having attached at least one organic group comprising a group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein Sp is a succinimidyl group having the formula:

wherein Q represents a bond or a  $-SO_2C_2H_4(NR'Alkylene)_P$ — group, wherein the group Alkylene is a linear or branched C<sub>1</sub>-C<sub>12</sub> alkylene group, R' is independently hydrogen, a C<sub>1</sub>-C<sub>6</sub> alkyl group, or an (AlkyleneNR)<sub>P</sub>R group, and p is an integer from 0-10, and R, which can be the same or different, represents hydrogen or a substituted or unsubstituted aryl or alkyl group.

A non-aqueous inkjet ink composition comprising a non-aqueous vehicle and a modified pigment product comprising a pigment having attached at least one organic group comprising a group represented by the formula -X-Sp-Alk, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, and Alk represents an alkenyl or alkyl group containing 50-200 carbon atoms, and wherein the organic group represented by the formula -X-Sp-Alk is a polyisobutenylsuccinimidylphenyl.

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